

WHAT IS CLAIMED IS:

1. A deodorizing apparatus for a passenger compartment of a vehicle comprising:

a temperature sensor that measures an inside temperature inside the passenger compartment;

a deodorizing means for removing odor components in the passenger compartment;

a compartment heating device that heats an inside of the passenger compartment;

a deodorizing operation control means for controlling the deodorizing means to remove odor components in the passenger compartment when the vehicle is parked and the measured inside temperature is equal to or higher than a predetermined temperature, which is on a level suitable for separating odor components adhered to an interior of the passenger compartment; and

a heating operation control means for controlling the compartment heating device to heat the inside of the passenger compartment so that the inside temperature is equal to or higher than the predetermined temperature when the vehicle is parked and the measured inside temperature is lower than the predetermined temperature.

2. The deodorizing apparatus according to claim 1, wherein the heating device includes an electric heater that is disposed in a vehicle seat.

3. The deodorizing apparatus according to claim 1, further comprising:

an odor sensor that measures a density of the odor components in the passenger compartment,

wherein when it is determined that the measured density of the odor components is equal to or higher than a predetermined density and the measured inside temperature is equal to or higher than the predetermined temperature while the vehicle is parked, the deodorizing operation control means controls the deodorizing means to remove the odor components from the passenger compartment, and

wherein when it is determined that the measured density of the odor components is equal to or higher than the predetermined density and the measured inside temperature is lower than the predetermined temperature while the vehicle is parked, the heating operation control means controls the heating device to heat the passenger compartment so that the inside temperature is equal to or higher than the predetermined temperature.

4. The deodorizing apparatus according to claim 1, wherein the deodorizing means is constructed of a blower that performs ventilation of the air inside the passenger compartment.

5. The deodorizing apparatus according to claim 1, wherein the deodorizing means is constructed of an air cleaner for the passenger compartment.

6. A deodorizing apparatus for a passenger compartment of a vehicle comprising:

an estimating means for estimating a timing that an inside temperature inside the passenger compartment is equal to or higher than a predetermined temperature for separating odor components adhered to an inside of the passenger compartment;

a deodorizing means for removing odor components in the passenger compartment; and

a deodorizing operation control means for controlling the deodorizing means so that the deodorizing means starts to remove the odor components in the passenger compartment at the timing, while the vehicle is parked.

7. The deodorizing apparatus according to claim 6, further comprising:

a solar radiation sensor that measures an amount of solar radiation to the vehicle,

wherein when it is determined that the measured amount of solar radiation is equal to or higher than a predetermined amount, the estimating means estimates the timing at a time predetermined period elapsed since the vehicle is parked.

8. The deodorizing apparatus according to claim 6, further comprising:

an odor sensor that measures a density of the odor components in the passenger compartment;

wherein when the vehicle is parked and it is determined that the measured density of the odor components is equal to or higher than a predetermined density, the deodorizing operation control means controls the deodorizing means so that the deodorizing means starts to remove the odor components at the timing.

9. The deodorizing apparatus according to claim 6, wherein the deodorizing means is constructed of a blower that performs ventilation of the air.

10. The deodorizing apparatus according to claim 6, wherein the deodorizing means is constructed of an air cleaner for the passenger compartment.

11. A method for deodorizing a passenger compartment of a vehicle comprising;

determining whether an inside temperature inside the passenger compartment is equal to or higher than a predetermined temperature while the vehicle is parked;

controlling a deodorizing means to remove odor components in the passenger compartment when it is determined that the inside temperature is equal to or higher than the predetermined temperature; and

controlling a heating device to heat the passenger compartment when it is determined that the inside temperature is lower than the predetermined temperature, so that the

inside temperature reaches the predetermined temperature.

12. The method according to claim 11, further comprising:

determining whether a density of odor components in the passenger compartment measured by an odor sensor is equal to or higher than a predetermined density,

wherein when the measured density is equal to or higher than the predetermined density, it is determined that the measured inside temperature is equal to or higher than the predetermined temperature.

13. A method for deodorizing a passenger compartment of a vehicle comprising:

estimating a timing that an inside temperature inside the passenger compartment reaches a predetermined temperature, while the vehicle is parked; and

controlling a deodorizing means so that the deodorizing means starts to remove odor components in the passenger compartment at the timing.

14. The method according to claim 13, further comprising:

determining whether an amount of solar radiation to the passenger compartment measured by a solar radiation sensor is equal to or higher than a predetermined amount,

wherein when the measured amount of solar radiation is equal to or higher than the predetermined amount, the estimating means estimates the timing at a time predetermined

period elapsed since the vehicle is parked.

15. The method according to claim 13, further comprising:

determining whether a density of odor components in the passenger compartment measured by an odor sensor is equal to or higher than a predetermined density,

wherein when it is determined that the measured density is equal to or higher than the predetermined density, the deodorizing means is controlled to start to remove the odor components at the timing.